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APPLICATION NO	. 1	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,963	10/531,963 04/19/2005		Andreas Reissner	10191/3816	8985
26646	7590	03/31/2006		EXAMINER	
KENYON	& KENY	ON LLP	WOLFE JR, V	WOLFE JR, WILLIS RAY	
ONE BROADWAY				ART UNIT	PAPER NUMBER
NEW YORK, NY 10004				3747	

DATE MAILED: 03/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailting date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailting date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  - Status  1) Responsive to communication(s) filed on  2a) This action is FINAL. 2b) This action is non-final.  3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  - Disposition of Claims  4) Claim(s) 5-8 is/are pending in the application.  - 4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) is/are allowed.			XV				
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6)⊠ Claim(s) 5-8 is/are rejected.	, <u> </u>						
· · · · · · · · · · · · · · · · · · ·	6) Claim(s) <u>5-8</u> is/are rejected.						
7) Claim(s) is/are objected to.	· <u> </u>	r alastian raquiroment					
8) Claim(s) are subject to restriction and/or election requirement.	o) Claim(s) are subject to restriction and/or	r election requirement.					
application Papers	Application Papers						
9) The specification is objected to by the Examiner.	9) The specification is objected to by the Examine	r.					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.	10) The drawing(s) filed on is/are: a) acce	epted or b) $\square$ objected to by the $\mathfrak l$	Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		• • • • • • • • • • • • • • • • • • • •	• •				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).			• •				
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.	11) Ine oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form P1O-152.				
riority under 35 U.S.C. § 119	Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:	<del></del>	priority under 35 U.S.C. § 119(a)	)-(d) or (f).				
1. Certified copies of the priority documents have been received.	1. Certified copies of the priority documents						
2. Certified copies of the priority documents have been received in Application No	2. Certified copies of the priority documents						
		3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).		• • • • • • • • • • • • • • • • • • • •					
* See the attached detailed Office action for a list of the certified copies not received.	See the attached detailed Office action for a list	or the certified copies not receive	ca.				
ttachment(s)	Attachment(s)						
Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)	1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
Notice of Draftsperson's Patent Drawing Review (PTO-948)  Paper No(s)/Mail Date	2) Dotice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ate				
Paper No(s)/Mail Date <u>4/19/05</u> . 6) Other:	3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 4/19/05.		atom Application (FTO-102)				

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eller or Kumada in view of Grunwald et al. Eller or Kumada discloses the claimed invention except for utilization of a plurality of heating coils, one having a smaller diameter than the other. Grunwald et al teaches that it is known to provide a heating filament (33) with a plurality of coils (35,37) with the inner coil (35) having a smaller diameter than the outer coil (37) as set forth at column 2, lines 38-61. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the of glow

plug of Eller or Kumada by providing the heating filament be a plurality of heating coils, one having a smaller diameter than the other as taught by Grunwald et al in order to provide for a quicker, more concentrated heating of the glow plug. Further, it would have been an obvious matter of design for one having ordinary skill in the art at the time the invention was made to provide the inner and outer coils of the heating filament of Grunwald be wound in opposite directions since applicants has not disclosed that the particular wounding arrangement of the coils solves any stated problem or is for any particular purpose and it appears that the heating filament of Grunwald would perform equally well with such an arrangement.

## Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The reference of Kaczynski et al is cited to show a glow plug with heating and control filaments.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Willis R. Wolfe, Jr. whose telephone number is (571) 272-4855. The examiner can normally be reached on Tuesday, Wednesday and Friday (5:30 AM-4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry C. Yuen can be reached on (571) 272-4856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Willis R. Wolfe, Jr.
Primary Examiner
Art Unit 3747

WRW March 29, 2006